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10/798,309	03/12/2004	Nobuhiro Ishizaka	00862.023514	5783

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EXAMINER	
DICKERSON, CHAD S	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/798,309	ISHIZAKA ET AL.	
	Examiner	Art Unit	
	Chad Dickerson	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *see attachment*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the DMA (107) in figure 3 as described in the specification on page 17. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- On page 17, line 1: the specification mentions the DMA with a reference number "107". The reference number does not appear to be in figure 3. It is recommended that either this reference number be added to the figure or omitted from the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe '289 (US Pat No 5689289).

Re claim 1: Watanabe '289 discloses a printing apparatus which divides a printing area in a scanning direction on a printing medium into a plurality of regions (i.e. in the system, the print head is used to print an area in a scanning direction representing multiple lines being read from a print buffer, which the multiple lines represents a plurality of regions in the document to be printed; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8) and has a print buffer for storing column data corresponding to the divided regions in order to print by scanning a print head on the printing medium (i.e. the print

buffer is used to store column data that has been recently converted to vertical data and this information is then printed as it is stored in the print buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), comprising:

input means for sequentially inputting block data corresponding to the divided regions (i.e. in the system of Watanabe '289, the image data that is stored in the image buffer (104) and the information is read sequentially and expanded into one line and stored in the 4-line buffer (107). The one line that is read and decoded is considered as block data since it corresponds to different divided regions within a document. The centronics sender, considered as an input means, is used to send the one line stored in 4-line buffer (107) to the centronics receiver in the printer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

acquisition means for acquiring N-bit raster data from the block data input to said input means (i.e. the raster buffer, considered as the acquisition means, receives, or acquires, lines of memory with a certain bit value (8x3640 bits) from the centronics sender; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

conversion means for converting the raster data into column data (i.e. the horizontal-to-vertical conversion circuit performs the feature of converting the raster information into vertical, or column data; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

transfer means for sequentially transferring the raster data acquired by said acquisition means to said conversion means (i.e. once the system realizes that the

raster buffer has 8 line of memory stored in the buffer, this information is sent sequentially to the horizontal-to-vertical conversion circuit. Therefore, the feature of transferring the raster data to a converter to perform column conversion is performed; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

second transfer means for sequentially transferring N column data converted by said conversion means to the print buffer (i.e. in the system, the information in the memory that was converted into vertical information is then transferred to the print buffer once 8 lines is recognized to be stored and converted in the horizontal-to-vertical converter. This performs the feature transferring the converted data to the print buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

storage means for storing the N column data transferred from said second transfer means in the divided regions of the print buffer (i.e. the print buffer stores the vertical, or column data, transferred from the horizontal-to-vertical converter. The print buffer has 8 lines that represent 8 separate lines or regions of the print data that is stored in the print buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8); and

control means for executing transfer processing of said transfer means, transfer processing of said second transfer means, and conversion processing of said conversion means in synchronism with a predetermined signal (i.e. the CPUs (111 and 215) control the execution transferring the image data from the facsimile to the printer, transferring the image data to the raster buffer and transferring the information in the raster buffer to the horizontal-to-vertical conversion circuit. The transfers of the image

data is based on the signal that represents when a buffer reaches the 8 lines of memory in the respective buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8).

Re claim 5: The teachings of Watanabe '289 are disclosed above.

Watanabe '289 the apparatus according to claim 1, wherein said conversion means comprises holding means for holding N raster data transferred from said transfer means (i.e. the horizontal-to-vertical conversion means is able to store information that was transferred from the raster buffer that was being also stored in the raster buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), and performs longitudinal/lateral conversion processing after said holding means holds the N raster data (i.e. the horizontal-to-vertical conversion means performs the vertical conversion to the data stored in the storage part of the device and this is performed once or after the data is being presently held in the conversion device; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe '289 in view of Iwasaki '403 (US Pat No 6328403).

Re claim 2: The teachings of Watanabe '289 are disclosed above.

Watanabe '289 discloses the apparatus according to claim 1, wherein the block data contains a plurality of color component data (i.e. in the system, the data of the lines can be either black or white; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8).

However, Watanabe '289 fails to teach the divided region is further divided into second regions in correspondence with the number of color components.

However, this is well known in the art as evidenced by Iwasaki '403. Iwasaki '403 discloses the divided region is further divided into second regions in correspondence with the number of color components (i.e. shown in figures 12, 13 and 17 are illustrated regions that require knowing the amount of a color that correspond to the print heads used in the system. Depending on the printing codes and the value analyzed from the printing codes will determine the color data that is used for printing; see col. 7, line 13 – col. 11, line 56).

Therefore, in view of Iwasaki '403, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of the divided region is further divided into second regions in correspondence with the number of color components in order to read out print data corresponding to the band position to be actually printed in units of colors (as stated in Iwasaki '961 col. 7, lines 27-65).

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe '289, as modified by Iwasaki '403, and further in view of Clark '856 (US Pat No 7265856).

Re claim 3: The teachings of Watanabe '289 in view of Iwasaki '403 are disclosed above.

However, Watanabe '289 in view of Iwasaki '403 fails to teach the apparatus according to claim 2, wherein the block data contains a code representing a data delimiter between first color component data and second color component data.

However, this is well known in the art as evidenced by Clark '856. Clark '856 discloses the apparatus according to claim 2, wherein the block data contains a code representing a data delimiter between first color component data and second color component data (i.e. Clark '856 discloses using the printer firmware using the firegroup count and the offset data contained in the print header to be used to calculate the beginning and the ending of each application of color on a page. The use of these two factors serves as a data delimiter; see col. 5, lines 31-61).

Therefore, in view of Clark '856, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of the apparatus according to claim 2, wherein the block data contains a code representing a data delimiter between first color component data and second color component data in order to

calculate the beginning and the ending points for application of a color (as stated in Clark '856 col. 5, lines 31-61).

Re claim 4: The teachings of Watanabe '289, as modified by Iwasaki '403, and further in view of Clark '856 are disclosed above.

Watanabe '289 discloses the apparatus according to claim 3, wherein said acquisition means outputs a second predetermined signal to said conversion means(i.e. in the system of Watanabe '289, when the CPU of the printer outputs a code to the respective buffer containing a certain amount of lines to be printed, this signal representing the memory information is output to the horizontal-to-vertical conversion means once the image information is determined to not contain all-white information and is 8 lines; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8).

However, Watanabe '289 in view of Clark '856 fails to teach when the code is determined.

However, this is well known in the art as evidenced by Iwasaki '403. Iwasaki '403 discloses when the code is determined (i.e. in the system of Iwasaki '403, the print codes are analyzed and are determined by the code analyzing means (616). When the codes are determined, a signal is given to the developing means to develop the data in order to be stored in the print buffers; see col. 7, line 16 – col. 11, line 56).

Therefore, in view of Iwasaki '403, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of when the code is determined in order to have print data analyzed and developed based on the analyzed print data (as stated in Iwasaki '403 col. 5, lines 1-11).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe '289, as modified by Iwasaki '403 and Clark '856, and further in view of Iwasaki '961 (US Pub No 2002/0175961).

Re claim 6: The teachings of Watanabe '289 in view of Iwasaki '403 are disclosed above.

Watanabe '289 discloses the apparatus according to claim 4, wherein said conversion means comprises holding means for holding N raster data transferred from said transfer means (i.e. the horizontal-to-vertical conversion means is able to store information that was transferred from the raster buffer that was being also stored in the raster buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), and when the second predetermined signal is input while said holding means holds M (M<N) raster data (i.e. in the system, when one line that is all white is interpreted, a signal is input into the system describing that fact. This signal occurs when the raster means is holding the a certain amount of raster information that is not greater than a certain number; (i.e. the horizontal-to-vertical conversion means is able to store information that was transferred from the raster buffer that was being also stored in the raster buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), sets data in said holding means (i.e. in the case when the all

white data signal is input into the system, the next image data is set in the raster buffer corresponding to the area of the next line; (i.e. the horizontal-to-vertical conversion means is able to store information that was transferred from the raster buffer that was being also stored in the raster buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8) and then performs longitudinal/lateral conversion processing (i.e. the horizontal-to-vertical conversion means performs the vertical conversion to the data stored in the storage part of the device and this is performed once or after the data is being presently held in the conversion device that was sent from the raster buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8).

However, Watanabe '289 in view of Iwasaki '403 and Clark '856 fails to teach sets (N-M) "0" data in said holding means.

However, this is well known in the art as evidenced by Iwasaki '961. Iwasaki '961 discloses sets (N-M) "0" data in said holding means (i.e. Iwasaki '961 discloses setting data of one random number area to be 1 while setting others to be the number of zero. This is expressed in figures 7a and 7b. The mask in the RAM (604) memory is set to one, while other masks are set to zero; see figs. 7-10; paragraphs [0076]-[0086]).

Therefore, in view of Iwasaki '961, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of sets (N-M) "0" data in said holding means in order to permit or prohibit printing of a dot in a certain area of an image (as stated in Iwasaki '961 paragraph [0078]).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe '289 in view of Clark '856 and Iwasaki '403.

Re claim 7: Watanabe '289 discloses a printing apparatus which divides a printing area in a scanning direction on a printing medium into a plurality of regions (i.e. in the system, the print head is used to print an area in a scanning direction representing multiple lines being read from a print buffer, which the multiple lines represents a plurality of regions in the document to be printed; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8) and has a print buffer for storing column data in the divided regions in order to print by scanning a print head on the printing medium (i.e. the print buffer is used to store column data that has been recently converted to vertical data and this information is then printed as it is stored in the print buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), comprising:

reception means for sequentially inputting block data corresponding to the divided regions (i.e. in the system of Watanabe '289, the image data that is stored in the image buffer (104) and the information is read sequentially and expanded into one line and stored in the 4-line buffer (107). The one line that is read and decoded is considered as block data since it corresponds to different divided regions within a document. The centronics sender, considered as an input means, is used to send the one line stored in 4-line buffer (107) to the centronics receiver in the printer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

decompression means for decompressing (i.e. the decoder (102) is used to perform decoding of encoded data; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), into raster data (i.e. this data becomes raster data since it is then transmitted to the raster buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), compressed data contained in the block data input to said reception means (i.e. the data initially input into the facsimile is encoded or compressed data. This data is stored in the image buffer until it is decoded and stored in the 4 line buffer for transmission by the centronics sender; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8);

conversion means for converting the raster data into column data (i.e. the horizontal-to-vertical conversion circuit performs the feature of converting the raster information into vertical, or column data; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8); and

means for storing in the print buffer the column data converted by said conversion means (i.e. the print buffer stores the vertical, or column data, transferred from the horizontal-to-vertical converter. The print buffer has 8 lines that represent 8 separate lines or regions of the print data that is stored in the print buffer; see figs. 3-6 and 8; col. 3, line 47 – col. 8, line 8), and the column data converted by said conversion means is stored in the region divided for each color on the basis of a determination result of said determination means.

However, Watanabe '289 fails to teach determination means for determining a color change code contained in the block data input to said reception means; wherein

the divided region is further divided for each color, and the column data in the region divided for each color on the basis of a determination result of said determination means.

However, this is well known in the art as evidenced by Clark '856. Clark '856 discloses determination means for determining a color change code contained in the block data input to said reception means (i.e. in the system of Clark '856, the beginning and endings of the colors that are to be applied to a page are known in the system by the firegroup count and the offset data. This determines the difference in the color change in the information that is input into the system for printing; see col. 5, lines 31-61).

Therefore, in view of Clark '856, it would have been obvious to one of ordinary skill at the time the invention was made to have a determination means for determining a color change code contained in the block data input to said reception means in order to calculate the beginning and the ending points for application of a color (as stated in Clark '856 col. 5, lines 31-61).

However, Watanabe '289 in view of Clark '856 fails to teach wherein the divided region is further divided for each color, and the column data in the region divided for each color on the basis of a determination result of said determination means.

However, this is well known in the art as evidenced by Iwasaki '403. Iwasaki '403 discloses wherein the divided region is further divided for each color (i.e. Iwasaki '403 provides different sections of print buffers divided for each color; see col. 7, lines 17-67

and col. 8, lines 1-53), and the column data in the region divided for each color on the basis of a determination result of said determination means (i.e. the color of the image data is then analyzed by the code analyzing means (616) to separate the print colors to the respective print buffer specific to the print color. The information is stored as column data in the print buffers; see col. 7, lines 17-67 and col. 8, lines 1-53).

Therefore, in view of Iwasaki '403, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein the divided region is further divided for each color, and the column data in the region divided for each color on the basis of a determination result of said determination means in order to analyze the print codes and store data that is developed into the print buffers of a corresponding color (as stated in Iwasaki '403 col. 7, lines 17-65).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki '403 in view of Watanabe '289.

Re claim 8: Iwasaki '403 discloses a printer driver executable in a host computer which outputs printing data to a printing apparatus in order to print by scanning a print head on a printing medium (i.e. Iwasaki '403 discloses a system with a host computer outputting information to the printer in order for the printer to output the information using a printing head on a printing sheet; see fig. 6; col. 4, line 54 – col. 5, line 11), comprising:

a generation step of generating a plurality of block data (i.e. in the system of Iwasaki '403, the host computer generates a plurality of print codes that represent the

image data, which is also analogous to the block data; see fig. 6; col. 4, line 54 – col. 5, line 11 and col. 7, line 13 – col. 11, line 56) corresponding to divided regions obtained by dividing a printing area (i.e. the printing codes are then transmitted to the respective printer to be analyzed and separated into the respective print buffers that correspond to certain colors used in the image in certain location within the image data; see fig. 6; col. 4, line 54 – col. 5, line 11 and col. 7, line 13 – col. 11, line 56) by one scanning on the printing medium into the plurality of regions in a scanning direction (i.e. in figures 12, 13 and 17, it is illustrated how multiple or different printing colors are generated in the printing direction of one scan of the printing head; see col. 12, line 47 – col. 13, line 25); and

an output step of sequentially outputting the block data generated in the generation step in correspondence with a direction in which the print head scans (i.e. in the system, the information that is related to the print codes are output to the print buffers related to the designated colors and read out as column data. The column data is in the direction in which the print head scans; see figs. 6, 12, 13 and 17; col. 4, line 54 – col. 5, line 11 and col. 7, line 13 – col. 11, line 56).

However, Iwasaki '403 fails to teach sequentially outputting the block data.

However, this is well known in the art as evidenced by Watanabe '289. Watanabe '289 discloses sequentially outputting the block data (i.e. the image data in the print buffer is read in sequence with the recording at each scan on the printing

medium to print while the image data is being read from the buffer; see col. 6, line 5 - col. 7, line 12).

Therefore, in view of Watanabe '289, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of sequentially outputting the block data in order to read data stored in the buffer and to record this information on a sheet with a recording head (as stated in Watanabe '289 col. 6, lines 58-66).

11. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki '403, as modified by Watanabe '289, and further in view of Clark '856.

Re claim 9: The teachings of Iwasaki '403 in view of Watanabe '289 are disclosed above.

Iwasaki '403 discloses the driver according to claim 8, wherein the block data contains first color data, second color data (i.e. in the system of Iwasaki '403, the printing codes contain color data related to cyan, magenta, black and yellow; see col. 7, lines 11-65).

However, Iwasaki '403 in view of Watanabe '289 fails to teach a color change code between the first color data and the second color data.

However, this is well known in the art as evidenced by Clark '856. Clark '856 discloses a color change code between the first color data and the second color data (i.e. Clark '856 discloses using the printer firmware using the firegroup count and the

offset data contained in the print header to be used to calculate the beginning and the ending of each application of color on a page. The use of these two factors serves as a data delimiter to determine the color change from one color to another; see col. 5, lines 31-61).

Therefore, in view of Clark '856, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a color change code between the first color data and the second color data in order to calculate the beginning and the ending points for application of a color (as stated in Clark '856 col. 5, lines 31-61).

Re claim 10: The teachings of Iwasaki '403, as modified by Watanabe '289, and further in view of Clark '856 are disclosed above.

However, Iwasaki '403 in view of Watanabe '289 fails to teach the driver according to claim 9, further comprising a compression step of compressing the first color data and the second color data by a predetermined compression method.

However, this is well known in the art as evidenced by Clark '856. Clark '856 discloses the driver according to claim 9, further comprising a compression step of compressing the first color data and the second color data by a predetermined compression method (i.e. in the system of Clark '856, the data segments pertaining to the different colors are compressed using a compression algorithm. The different data segments represent the different types of color data; see col. 4, line 14 – col. 5, line 61).

Therefore, in view of Clark '856, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a compression step of compressing the first color data and the second color data by a predetermined compression method in order to use the compression algorithm to compress each data segment (as stated in Clark '856 col. 4, lines 26-42).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Nobata '656 (US Pat No 6111656) discloses a image communication apparatus that is able to acquire image data information and transfers the information within the equipment through several buffers and units for conversion before printing the image data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CD/ CD
Chad Dickerson
December 17, 2007

AUNG S. MOE
SUPERVISORY PATENT EXAMINER
12/26/07